REMARKS

The application has been amended to correct minor typographical and grammatical errors, and to more clearly identify reference numeral (2) as referring to the cylinder of the battery case. Claims 1-15 have been cancelled and claims 16-43 have been added. It is submitted that claims 16-43 correspond to elected Group I and that no new matter has been added. Support for the new claims can be found throughout the application as originally submitted.

Conclusion

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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Version with markings to show changes made

In the specification:

On Page 1, the paragraph beginning at line 32, please substitute the following paragraph:

Figure 2 shows the ceramic ring sandwich with the ceramic ring between a ring of Ti and [between] a different ring of Ti-6Al-4V, and the gold-based braze.

On Page 2, the paragraph beginning at line 6:

The battery (1), as shown in Figure 1, is constructed of a titanium alloy [case] cylinder (2), the alloy being Ti-6Al-4V. This alloy is principally titanium with 6% aluminum and 4% vanadium, with oxygen, nitrogen, carbon, hydrogen, and iron typically present as trace elements. One end cap (3), which completes the bottom of the positive casing, is also of the titanium alloy Ti-6Al-4V. The ceramic ring sandwich (20) is shown in Figures 1 and 2. First looking at Figure 2, the ceramic ring (21) is brazed by the gold alloy braze (24) to a [one] ring of titanium (23) and [the other] to another ring of Ti-6Al-4V[.] (22). The gold alloy braze (24) is one [which] that contains more than 50% gold by weight. A specific type of gold alloy braze (24) is 96.4% gold, 3.0% nickel, and 0.6% titanium. Some trace elements may be present with a corresponding slight adjustment in the composition percentages. The braze is chosen so that it can stand up to the electrochemical conditions inside the battery with which it will come in contact. The ceramic ring (21) is of aluminum oxide, zirconium oxide, or zirconium oxide with 3% yttrium.

On Page 2, the paragraph beginning at line 20:

Returning to Figure 1, the ceramic ring sandwich (20) is placed on the open end of the titanium alloy [case] cylinder (2) with the titanium alloy ring (22) toward the [case] cylinder (2). The titanium alloy ring (22) is then laser welded to the titanium alloy [case] cylinder (2). Subsequently, a titanium end cap (4) with a feed[-]through hole (5) is laser welded to the titanium ring (23) of the ceramic ring sandwich (20).

On Page 3, the paragraph beginning at line 4:

The titanium alloy (Ti-6Al-4V) [case] cylinder (2) has the desirable properties of titanium, such as high strength for a relatively low weight; and the case has the requisite ability and electro-activity to be used as a positive current carrying element where a battery's positive electrode exhibits more than 3.5 V vs. Li/Li^+.

On Page 3, the paragraph beginning at line 8:

Typically, once the ceramic sandwich (20) is welded to the [battery case (1)] cylinder (2), the battery electrodes (not shown) can be inserted into the [case] cylinder (2) and the feedthrough pin (not shown) inserted through the hole (5) in the lid end cap (4). The feedthrough pin (not shown) is welded shut to provide a leak-tight seal. The battery (1) is filled with electrolyte (not shown) and laser welded closed on the bottom end cap (3). Tabs (not shown), which are connected to the positive electrode (not shown), can be folded out of the case [(2)] and laser welded at the same time as the bottom end cap (3).